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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,992

11/12/2003

Lee D. Saathoff

EI-7594

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34769

7590

08/29/2006

NEW MARKET SERVICES CORPORATION  
(FORMERLY ETHYL CORPORATION)  
330 SOUTH 4TH STREET  
RICHMOND, VA 23219

EXAMINER

BELLAMY, TAMIKO D

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/705,992

Applicant(s)

SAATHOFF ET AL.

Examiner

Tamiko D. Bellamy

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/23/04 &amp; 5/8/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 1-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group I, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/28/06.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 35-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts et al. (5,872,082) in view of Tomizawa et al. (5,880,073).

Re claim 35, Watts et al. discloses measuring friction via a method of using a low velocity friction apparatus (LVFA) to determine the coefficient of friction of automatic transmission fluids during the acceleration of the apparatus from 0.51 m/s and then deceleration back to rest (Col. 12, lines 15-55). While Watts et al. does not specifically disclose using a LFW-1 test apparatus, the device of Watts et al. would operate equally as well using a LFW-1 test device, and it is well known in the art to use either a LFW-1 or a LVFA apparatus to measure friction of power transmission fluid (**See cited reference in conclusion section**). As depicted in fig. 1, Tomizawa et al. discloses LFW-1 tester including a ring (1) rotating relative to block (2) to determine the friction of a power transmission fluid

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(Col. 8, lines 10-23). Therefore, to modify Watts et al. by employing a LFW test apparatus would have been obvious to one of ordinary skill in the art at the time of the invention since Tomizawa et al. teaches a test apparatus having these design characteristics. The skilled artisan would be motivated to combine the teachings of Watts et al. and Tomizawa et al. since Watts et al. states that his invention is applicable to measuring friction of a power transmission fluid using a LVFA test apparatus and Tomizawa et al. is used to provide the added limitation of using a LFW-1 type apparatus for measuring friction of a power transmission fluid.

Re claim 36, Watts et al. discloses measuring four measurements (Col. 12, lines 53-55). While Watts et al. does not specifically measuring friction to provide about 50 or more measurements, the method Watts et al. discloses can easily be repeated until 50 measurements are obtained using minor skill in the art. Therefore, to employ Watts et al. on 50 or more measurement would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining 4 measurements.

Re claim 37, Watts et al. discloses measuring four measurements (Col. 12, lines 53-55). While Watts et al. does not specifically measuring friction to provide about 100 or more measurements, the method Watts et al. discloses can easily be repeated until 100 measurements are obtained using minor skill in the art. Therefore, to employ Watts et al. on 100 or more measurement would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining 4 measurements.

Re claim 38, Watts et al. discloses measuring four measurements (Col. 12, lines 53-55). While Watts et al. does not specifically measuring friction to provide about 2800 or more

measurements, the method Watts et al. discloses can easily be repeated until 2800 measurements are obtained using minor skill in the art. Therefore, to employ Watts et al. on 2800 or more measurement would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining 4 measurements.

Re claim 39, Watts et al. discloses measuring four measurements (Col. 12, lines 53-55). While Watts et al. does not specifically repeat a cycle about t 1 to about 50 times, the method Watts et al. discloses can easily be repeated until 50 measurements are obtained using minor skill in the art. Therefore, to employ Watts et al. on a 50 or more measurement would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining 4 measurements.

Re claim 40, Watts et al. discloses using new power transmission fluid (Col. 12, lines 15-26).

Re claim 41, Watts et al. discloses using aged power transmission fluid (Col. 12, lines 41-46).

Re claim 42, Watts et al. discloses measuring friction using a new fluid, aging a first power transmission fluid to provide an aged first transmission fluid, and measuring the friction of the aged first transmission fluid (Col. 12, lines 15-46).

Re claim 43, Watts et al. discloses comparing measured friction of aged and new first power transmission fluid.

Re claim 44, Watts et al. discloses various automatic transmission fluids where tested, which is equivalent to a measuring a second power transmission fluid that is different from a first power transmission fluid.

Re claim 45, Watts et al. discloses comparing the friction measurement, and selecting power transmission for a particular power application.

Re claim 46, Watts et al. discloses the power transmission application comprises automatic transmission.

Re claim 47, Watts et al. discloses measuring friction using a new fluid, aging a first power transmission fluid to provide an aged first transmission fluid, and measuring the friction of the aged first transmission fluid (Col. 12, lines 15-46). Watts et al. discloses comparing measured friction of aged and new first power transmission fluid. Watts et al. discloses measuring friction of a second power transmission fluid using a new fluid, and aging the second power transmission fluid to provide an aged first transmission fluid, and measuring the friction of the aged second transmission fluid (Col. 12, lines 15-46). Watts et al. discloses comparing measured friction of aged and new second power transmission fluid.

Re claims 48, Watts et al. discloses comparing the friction durability of a first and second power transmission fluid.

Re claims 49 and 50, Watts et al. discloses the first transmission fluid comprising alkoxylated alcohol and a second power transmission fluid free of alkoxylated alcohol (Col. 11, lines 1-67, Col. 12, lines 1-15).

Re claim 51, Watts et al. discloses the particular power transmitting application comprises an automatic transmission.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

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The following patents are cited to further show the state of art with respect to measure friction of a power transmission fluid using a multiple of test apparatuses such as the LFW-1 testing method and the low-velocity sliding friction method testing:

(JP 11092779 A) as to Mitsui et al.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190.

The examiner can normally be reached on Monday - Friday 7:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamiko Bellamy

T.B.  
August 21, 2006

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A handwritten signature in black ink, appearing to read "Hezron Williams", followed by a long horizontal line extending to the right.

HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800